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## INTERNATIONAL SEARCH REPORT

H01J37/10

Intentional Application No PCT/EP2004/012502

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01J37/02 H01J9/18

According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  $\ensuremath{\text{IPC}}$  7  $\ensuremath{\text{H01J}}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUM	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	US 3 694 687 A (GLENN WILLIAM ELLIS) 26 September 1972 (1972-09-26) figures 1,2	1-4,6,8, 14,17,19
X	US 2 507 331 A (HENRI BRUCK ET AL) 9 May 1950 (1950-05-09) column 2, line 4 - line 8; figure 1	1-4,6,8, 14,17,19
X	US 6 362 486 B1 (INTO STEPHEN W) 26 March 2002 (2002-03-26) column 3, line 28 - line 49; figure 3	1-4,6, 14,18,19
X	US 2 458 962 A (ERIC SHELTON EDWARD) 11 January 1949 (1949-01-11) column 3, line 47 - line 53; figures 2-5	1-4,6,8, 17

Further documents are listed in the continuation of box C.	Y Patent family members are listed in annex.
*Special categories of cited documents:  'A' document defining the general state of the art which is not considered to be of particular relevance  'E' earlier document but published on or after the international filing date  'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of enother citation or other special reason (as specified)  'O' document referring to an oral disclosure, use, exhibition or other means  'P' document published prior to the international filing date but later than the priority date claimed	<ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul>
Date of the actual completion of the international search  17 March 2005	Date of mailing of the international search report  23/03/2005
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL – 2280 HV Rijswijk  Tel. (+31-70) 340–2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340–3016	Authorized officer  Zuccatt1, S

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X	GB 2 161 019 A (INT PRECISION INC) 2 January 1986 (1986-01-02) page 4, line 105 - line 122; figure 6	1-4,6,8, 14,18,19
Y	PATENT ABSTRACTS OF JAPAN vol. 0020, no. 10 (E-006), 25 January 1978 (1978-01-25) -& JP 52 126160 A (HITACHI LTD), 22 October 1977 (1977-10-22) abstract; figure 6	1-4,14, 18,19
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Α	US 2 581 446 A (ROBINSON CHARLES F) 8 January 1952 (1952-01-08) figures 1,2	1-19
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